

Dr. David G. Williams circa 2001

seem to be as common as it once was.

I think part of the problem, particularly when it comes to improving health habits, is the idea that only drastic changes will have any significant impact. When you have several health problems or issues, trying to resolve all of them at once can seem overwhelming. But keep in mind that the process is really more like "eating an elephant." You have to take one bite at a time. Most people don't understand that very small, simple, changes in their routine can result in very significant improvements in your overall health.

I'll share some little-known, yet simple, procedures that you can use immediately to both monitor your health and help reduce your risk of dying from heart disease, cancer, and other common problems. Best of all, most require very little extra effort on your part. If you're resolved to improve your health, these ideas will help you get started.

## **Reserves for Heart Health**

Last year, after Lance Armstrong won the Tour de France yet again, there was a lot of attention focused on "resting heart rates." The average resting heart rate for most healthy men is roughly 70 beats per minute (bpm), but Armstrong's is between 32 and 34 bpm. (Lance also has a heart that is onethird larger than normal, however.)

# Springtime Check-in

nother year has sped by and, as we head toward spring and summer, I thought it might be a good time for you to check in on your New Year's resolutions. Maybe it's just a sign of the times (or maybe I'm just getting older), but making resolutions doesn't Research has shown that the resting heart rate is one fairly accurate method of predicting longevity. Like many of the factors I'll be discussing, your resting heart rate is a roundabout method of evaluating what, if any, "reserve" you might have. In the past, I've talked about building up a reserve of various nutrients and antioxidants in your body. That's part of the rationale for taking a good multi-nutrient supplement: so that when your body is subjected to additional physical, chemical, or mental stress, you are better equipped to deal with the problem. A "physical reserve" works in a similar fashion.

To accurately determine your resting heart rate, take it first thing in the morning before you get out of bed—because practically everything you do can increase your heart rate: moving, eating, drinking, even thinking. (Keep in mind that your heart rate will increase in response to certain medications; stimulants such as coffee, colas, and tea; illness or fever; unresolved stress; and even some supplements.) As soon as you wake up, check the pulse on the side of your neck and count the number of



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You will observe with concern how long a useful truth may be known, and exist, before it is generally received and practiced on.—Benjamin Franklin beats that occur during 60 seconds. (Or count the number in 15 seconds and multiply by four.) A resting heart rate of 65 bpm or lower is desirable. As the rate begins to increase over that amount, the chance of heart problems also begins to rise. (*Eur Heart J* 99;1:B3–B9) (*Eur Heart J* 00;21:116–124)

Higher resting heart rates are often associated with elevated blood pressure, which damages blood vessels and results in plaque buildup in an effort to repair the damage. High blood pressure may also dislodge arterial plaques—leading to heart attack and stroke. (*Eur Heart J 99;1:H29–H32*)

Additional studies have shown that men with resting heart rates above 75 bpm are three times as likely to die from a heart attack as those with lower rates. A resting heart rate of 80 bpm quadruples the risk.

The technique to lower your resting heart rate involves varying the intensity of some form of aerobic exercise such as walking, jogging, or bicycling. For example, if you walk daily, increase the intensity of your walk once or twice a week. Instead of using your normal pace, walk as quickly as possible for a short distance (until you begin to feel fatigue set in) and then turn around and walk at a slower pace back to your starting point. Repeat this process over longer or shorter distances, depending on how you feel, until you are fatigued. Adding this to your regular-paced exercises will make your heart more efficient and drop your resting heart rate making you far less susceptible to a heart attack.

## The Difference Makes All the Difference

Another very important self-test involves what is called your pulse pressure. The significance of pulse pressure has been known for some time, but its importance has been widely ignored by most medical professionals. It is, however, a very accurate predictor of future cardiovascular accidents, particularly in the elderly. As you may recall, the top blood pressure number is called the systolic pressure and the lower number is the diastolic pressure. The difference between the two is your pulse pressure. For example, if you had a blood pressure of 120/80 mm Hg (millimeters of mercury), your pulse pressure would be 40 mm Hg—the difference between 120 and 80. The higher your pulse pressure, the greater your risk of a future cardiovascular event (such as heart attack or stroke).

Very few studies concentrate on lowering pulse pressure. The glaring lack of research in this area is probably due to the fact that increases in pulse pressure are a result of arteries becoming less elastic as we age. Certain drugs can lower blood pressure but, as far as I know, none have been shown to improve or restore elasticity to the blood vessels. As a result, most doctors concentrate their efforts on lowering overall blood pressure values rather than pulse pressure. In many cases the "improvements" they see may be somewhat misleading.

For example, according to data from the Framingham study, a 65-year-old man with a blood pressure of 170/70 has a risk of heart failure or other cardiovascular event twice as high as that of another man of the same age whose blood pressure is 170/110. (*Circulation 99;100(4):354–360*)

In the above example, even though the first man has the lower blood pressure, his risk is higher simply because his pulse pressure is greater. Even in individuals with a relatively low cardiovascular risk (normal cholesterol and blood pressure levels, healthy weight, et cetera), a high pulse pressure is a very significant predictor of future cardiovascular events—especially those resulting in the death of the individual. (*Hypertension 97;30:1410–1415*)

A pulse pressure of around 40 mm Hg or below is considered normal. As it begins to climb higher, it indicates a greater stiffness and inelasticity of the aorta and other arteries. (In rare cases it may also indicate a leak in the aortic valve.)



**ALTERNATIVES** Author: Dr. David Williams; Publisher: Robert Kroening; Editor: Bill Todd ISSN# 0893-5025. Published monthly for \$69.99/yr. by Mountain Home Publishing at 7811 Montrose Road, Potomac, MD 20854. Editorial Office: 7811 Montrose Road, Potomac, MD 20854. Periodicals postage paid at Rockville, MD and at additional mailing offices.

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Dr. Williams works closely with Mountain Home Nutritionals, a division of Doctors' Preferred, LLC and subsidiary of Healthy Directions, LLC, developing his unique formulations that supply many of the hard-to-find nutrients he recommends. Dr. Williams is compensated by Doctors' Preferred, LLC on the sales of these nutritional supplements and health products, which allows him to continue devoting his life to worldwide research and the development of innovative, effective health solutions.

One begins to see a gradual increase in cardiovascular deaths as the pulse pressure climbs to 45 and 55 mm Hg. Very significant increases in future cardiovascular deaths begin to occur when the pulse pressure goes to 60 and 65 mm Hg and above. In one recent study, an international group of researchers reviewed data on 12,763 men aged 40 to 56 from the US and six other countries. The men were originally surveyed from 1958 to 1964, and then tracked for the following 20 years. The researchers discovered that each 10 mm Hg increase in pulse pressure corresponded to a 22 percent increase in cardiovascular death risk. And, when compared to increases in systolic and diastolic blood pressures, pulse pressure was found to be the most accurate and crucial predictor of future cardiovascular events. (Arch Intern Med 05;165:2142-2147)

It's easy to check and monitor your pulse pressure if you have the ability to take your blood pressure, and it's something I recommend you do at least several times a year.

## The Argument for Arginine

In addition to all the nutritional and dietary recommendations for cardiovascular health that I've made over the years, getting your blood pressure under control is a necessary start. There are a few techniques/supplements that can specifically help address the issue of vascular elasticity and increased pulse pressure. Most of these are still being overlooked by the majority of doctors.

Probably the greatest preventive technique is exercise. Once again, it boils down to building a "reserve." Increased and varying blood pressure from exercise increases the diameter of healthy blood vessels and opens up collateral vessels necessary to supply the increased need for oxygen. Leisurely walking at a constant pace burns calories, but to increase the size, elasticity, and carrying capacity of the arteries you must—as I mentioned before—exercise at a higher intensity.

Weight lifting is another useful technique. When you lift weights (or use some other form of resistance exercise, such as rubber bands, push-ups, or pull-ups) blood is forced or pumped into the working muscles. This action expands the existing blood vessels and can even create new blood channels as new muscle tissue is formed. It creates more of the physical "reserves" that I mentioned earlier.

One particular supplement that will improve blood flow during exercise is L-arginine. If you recall, this amino acid gets broken down by the body and releases nitric oxide (NO)—which causes blood vessels to dilate, or open, increasing blood flow and helping lower pulse pressure.

You can lower your pulse pressure and risk of dying from heart attack by taking one gram of Larginine prior to exercising. (As you continue exercising you can gradually increase the L-arginine by one gram each week until you're taking 4 grams each day.) L-arginine is available from JoMar Labs, at 800-538-4545 or *www.JomarLabs.com*.

## **Second-Level Solutions**

Niacin is another nutrient that is very inexpensive but effective at increasing circulation. It's so effective that many people immediately notice a "flushing" sensation and are hesitant to use it. While the flushing might be a little un-nerving initially, it is temporary (10 to 20 minutes). It usually subsides with continued use, and it isn't harmful. (The effect can also be lessened by taking it with food.) Starting with 50 to 100 mg of niacin will provide benefits for most people, but in severe circulation problems or deficiencies I would suggest working up to as much as a gram (1,000 mg) a day. Niacin is available at health food stores.

If you've neglected your body, eaten poorly for years, and/or currently have poor cardiovascular health, in addition to the above techniques it will more than likely take additional steps to return some degree of elasticity to your arteries and drop your pulse pressure—both of which can be done with two supplements I've discussed in the past, lecithin granules and nattokinase.

Two tablespoons of lecithin granules a day can help lower the melting point of cholesterol in your arteries and start the process of breaking down arterial plaques that interfere with blood vessel expansion. Lecithin granules (and niacin) happen to be one of the least expensive and underutilized medical miracles on the market. For years I used lecithin from Bronson Labs, 800-294-5507 or *www.bronsonvitamins.com*.

Additionally, nattokinase (the soy-based enzyme from Japan that helps dissolve fibrin deposits) has extensive research to support its use to help mitigate (and even prevent) heart attack damage. I would love to see studies demonstrating the effect of it and the other therapies I've outlined on the lowering of pulse pressure and the hundreds of thousands of *(Heart Health continued on page 61)* 



## NEWS TO USE FROM AROUND THE WORLD

## **Listening Skills**

SAN FRANCISCO—I recently tested a computer program developed with audiologists at the University of California called LACE—which stands for Listening and Communication Enhancement.

LACE is a computerized, home-based training program for individuals who have hearing loss or difficulty listening in noisy environments. The self-directed program takes listeners through a series of different scenarios where they listen to different conversations in noisy environments or competing voices. The variety and difficulty changes as listening skills progress.

Hearing is one of the senses that degrades as we age. And while hearing aids work to amplify the sounds we hear, little effort has been focused on improving listening skills, which is actually a function of the brain. The LACE program was developed to fill this void.

If listening has become a problem, or if you have hearing difficulties, I think LACE is an excellent tool to have. I think it would be particularly useful for individuals who are just beginning to use a hearing aid. You can listen to samples of the program on the company's Web site at www.NeuroTone.com. It can also be ordered online at www.NeuroToneStore.com. (The program is on a CD and requires a computer to operate.)

## **Ear Infections Blown Away**

NEW YORK—If one of your children/grandchildren has a chronic middle ear infection (or "fluid ear" or "glue ear") there's a new device that can be very effective in helping relieve the problem.

In a recent study at the New York Eye & Ear Infirmary researchers tested a device called the EarPopper on a group of 94 children (aged 4 to 11) who had at least a two-month history of middle ear effusion with associated hearing loss. Half of the participants were given the EarPopper to use at home for a 7-week period. At the end of the study, 73.9 percent of those using the device were once again hearing within the normal limits while only 26.7 percent in the control group were doing so. (*Ear Nose Throat J 05;84(9):567–576*)

The device is based on what is called the Politzer maneuver. It is a way to gently force air into the eustachian tube, which equalizes the pressure in the inner ear with that of the throat. (You may be more familiar with another technique that achieves basically the same effect: the Valsalva maneuver, in which one pinches both nostrils shut and then tries to force air out the nose. This also increases pressure in the eustachian tube and "pops the ear" to relieve pressure.)

Using the EarPopper is simple, and there is no danger of putting too much pressure on the ear drum. The tip of the battery-operated device is placed in one nostril while the other is gently pinched shut. A button is pushed to start airflow and the child (or adult) is asked to swallow with their mouth closed. (Small children can hold a little liquid in their mouth, which helps them swallow.) The procedure is then repeated in the other nostril. It can be repeated as necessary.

The company that makes the EarPopper is Micromedics, Inc., 1270 Eagan Industrial Road, St. Paul, MN 55121, and they can be reached at 800-624-5662.

If there's any downside to the product I guess it would be that it is only available with a doctor's prescription, and it costs about \$300. However, when you consider that fluid buildup in the middle ear is the second leading cause of visits to pediatricians (colds are number one), it appears to be a good alternative. The standard treatments are antibiotics (over 10 million prescriptions a year for this problem) or drain tubes (costing over \$4 billion a year)—and the success of both of these is questionable.

#### Sodas, Women, and BP

BOSTON—Researchers have linked the consumption of soft drinks by women to an increased risk of high blood pressure.

The long-term Nurses' Health Study looked at 33,000 women with high blood pressure and found that an increase in caffeine intake increased the risk of hypertension. But when coffee drinkers were separated from soda drinkers, the picture changed.

It seems that the more coffee the women drank, the lower their risk of developing hypertension. Those drinking only one cup per day had a very slight increased risk, but the risk decreased as the consumption increased to 2, 3, 4, 5 and even 6 cups a day.

The opposite was true in women who drank sugared cola. Every increase in soda beverages increased the risk. (Sugar-free colas were only slightly less risky.)

The researchers concluded that there must be other offending ingredients in colas besides the caffeine that causes an increased risk of developing hypertension. (*JAMA 05:294(18):2330–2335*)

I'm not a big fan of colas, to say the least. I think they have contributed to many health problems we experience today, including the increase in diabetes and obesity we're now seeing. For women, soft drinks may be particularly harmful due to their phosphoric acid content. The acid alters metabolism and leads to bone loss and softening, which, in turn, has added to the huge increase we've seen in the number of women suffering from osteoporosis. If you're looking for something fizzy, try a glass of seltzer water with pomegranate juice added for flavor. cardiovascular deaths it could prevent in this country alone. Look for nattokinase from Nutricology, at *www.nutricology.com* or 800-545-9960

### Over the Teeth, Through the Gums, Look Out Heart, Here It Comes

Finally, periodontal disease and its relation to heart disease is another area that is relatively easy to deal with but commonly overlooked. I don't know of any cardiac specialist or surgeon that discusses this problem with their patients. Decades of research has confirmed the connection between periodontal disease and cardiovascular disease, but its importance has never been stressed to the public. Tooth and gum problems continue to be looked upon strictly as an inconvenience or aesthetic issue rather than as a serious underlying health condition.

Chronic inflammation of your gum tissue dumps a never-ending cascade of toxins, bacteria, and other pathogens into your bloodstream. It can trigger and/or accelerate inflammation in the arterial walls and lead to atherosclerosis, blockages, heart attack, and even death. It also places a constant burden on your immune system. Don't overlook this area of your health.

Periodontal treatment has come a long way in the last few years, but it often requires seeing a periodontist rather than your family dentist. It is well worth the effort and expense. If you have problems that can't be resolved with regular flossing, brushing (using regular bar soap, as I've discussed in the past), and mouth rinses, then I urge you to get a referral to a good periodontist.

## Weighty Resolutions

When it comes to resolutions, losing a few extra pounds is at the top of most people's list. Obesity is one of the biggest problems facing our society today.

Unfortunately, there's not a "magic bullet" for losing weight that will work for everyone. And with different body types, hormone imbalances, and genetic makeups, there's really no perfect diet that will work for everyone. Losing weight comes down to burning more calories than you consume. You can either consume fewer calories (modify your diet) or increase the number of calories you burn (improve your metabolic rate and/or exercise)—or do a combination of the two.

#### **Basic Steps to Better Size**

Before you do anything else, check your basal metabolic rate to determine if your thyroid is underactive. It's very easy to check and normally very simple and relatively inexpensive to correct with such natural supplements as iodine and glandulars. [See "The Test of Time" on page 63.]

Next, cut out sugar and sugar-laden foods from your diet. In fact, avoid all sweets—even foods that are artificially sweetened. Artificial sweeteners have been shown to disrupt metabolic rates, interfere with the natural feeling of being full, and increase overall food consumption.

Begin to eat several (5 or 6) smaller meals a day rather that 2 or 3 large ones. Don't eat more, just spread it out. Eat your largest meal in the morning and your lightest meal in the early evening. Be especially aware of what is considered a portion of food—it's far easier to limit portions than to count calories. In this country, super-sized portions have become the norm, and it shows. (Queen-sized mattresses have now been enlarged by 6 inches over their previous size, to provide for larger bodies.)

A few examples of serving sizes:

meat—the size of your palm (not counting
 your fingers)
fish—the size of your checkbook

vegetables or fruit—the size of your fist

- beans, pasta, rice, chips, or pretzels—one rounded handful
- cheese-size of 4 stacked dice

If you look at the above serving sizes and think they are small, I agree. Eating 5 or 6 smaller meals, however, will drastically cut down on the cravings and get you away from the feeling that you have to "fill up" at every meal.

#### **Bulk Up to Slim Down**

Another simple method to help you lose excess weight is to increase your intake of dietary fiber. In the 1980s, the big "discovery" was the importance of fiber in the diet. There were dozens of reports explaining how high-fiber diets could prevent heart disease, colon cancer, and dozens of other problems. For a while, high-fiber diets were all the rage. For reasons unknown to me, they fell out of favor. If you want to lose weight or maintain a proper weight, a diet rich in fiber can help.

There are two kinds of fiber in food—soluble and insoluble. In a nutshell, insoluble fiber doesn't dissolve in water and is considered "roughage." It swells and softens the stool, and it also scrubs and stimulates the intestines as it passes through. It helps protect against constipation, cancer, and the formation of pockets and inflammation in the colon. On the other hand, soluble fiber dissolves in water and forms sticky gums and gels. A good example is much of the fiber found in oats. Soluble fibers tend to absorb certain compounds like toxins, bile acids, cholesterol, et cetera. They also slow the digestion of food, which improves insulin regulation and helps prevent diabetes.

The top sources of fiber include fruits and vegetables (with the skins left on when possible), beans, and whole grains. Stay away from such refined foods as white flour, cream of wheat, oat flour, cornstarch, and white rice—all of which are low in fiber.

From a dietary standpoint, high-fiber foods are very versatile. Some, like beans, can be the main course, while others, such as fruit, popcorn, and raw vegetables, make excellent snacks. High-fiber foods generally are very low in fat and are made up mostly of high-quality proteins and complex carbohydrates. The fiber itself has no calories, yet provides bulk and a sense of fullness. Fiber isn't the cure for obesity, but a high-fiber diet with proper nutrition can definitely help you lose weight.

A high-fiber diet decreases what is called "transit time" in the gastrointestinal tract—the time it takes for food to move through your body. A shorter transit time results in less formation and absorption of toxic material into your system. Be aware, though, that higher-fiber diets require an increase in fluid intake. As you start to add more high-fiber foods, be sure you're drinking plenty of water.

Estimates are that most adults consume between 10 and 15 grams of fiber a day but should be taking in at least 25 to 30 grams. Eating 30 grams a day has been shown to reduce the weight gain that seems to gradually accumulate as one gets older.

### **Getting Around Makes You Less Round**

On the other side of the coin, you can improve the state of your health and lose weight by burning more calories rather than trying to reduce the amount you consume. It's not as hard as you think. Most people are under the impression that they have to work out several hours a week to see any benefit. That's definitely not the case. When combined with a sensible diet, you can raise your overall metabolic rate, improve muscle tone and energy level, and reduce your overall risk of premature death.

In *The No-Sweat Exercise Plan*, Dr. Harvey Simon gives some very good examples:

- 55 flights of stairs a week results in a 33 percent lower death rate.
- One hour of gardening a week equates to a 66 percent lower risk of sudden cardiac death (heart attack).
- Walking one hour a week lowers the risk of coronary artery disease by 51 percent (that's less than ten minutes a day).
- Exercising 30 minutes, two days a week, results in a 43 percent lower mortality risk.

A recent *Wall Street Journal* article cited a 2001 study where researchers reviewed 44 different exercise studies. They discovered that most of the benefits of exercise kick in with the first 1,000 calories of increased activity each week, which reduced the risk of dying during the various study periods by 20 to 30 percent.

It doesn't take a gym membership or a two-mile jog every day to significantly improve your overall health, slow the aging process, or increase your life expectancy. Exercise intensity certainly plays a role, but the primary key seems to be persistence.

Based on this new research, which clearly shows a benefit from exercising as little as nine minutes a day, there's really no excuse for not doing so. Just keep in mind that it has to be done on a regular basis. Personally, I've found that even on the days I've fallen behind schedule or don't feel like exercising, if I just do a little something—even a very short portion of my regular routine—it helps me stay motivated and on track. I've found the more days I miss, the harder it is to get back into a routine. And staying in a good routine is crucial to maintaining a healthy weight.

## **Intellectual Reserves**

If taking steps to protect your mental health wasn't on your list of New Year's resolutions, it probably should have been. Research shows that the human brain begins to lose memory by the age of 18, and the ability to memorize becomes far more difficult as early as age 30. At age 40, there are obvious signs of wear and tear on the brain. And, like many other diseases once relegated to the elderly, the beginnings of Alzheimer's and Parkinson's are now showing up at 50 years of age. After age 65, the The Test of Time: Basal Metabolic Rate



Hypothyroidism is often overlooked. One of the simplest and most accurate methods to check for the problem was discovered some years ago by Dr. Broda Barnes. Using his method, you can take your temperature and get a good idea of your basal metabolic rate and thyroid condition.

## To Perform the Test:

- Put an oral thermometer by your bedside. If you use a mercury one, shake it down to 96 degrees before retiring.
- 2. Upon awakening, place the thermometer in your armpit and leave it there for 10 minutes before getting out of bed.
- 3. Record the temperature.

*Note:* Men can take their temperature any time. Women in their menstrual years get the most accurate reading on the second or third day after menstrual flow starts. Before the first menstrual period or after menopause, the temperature may be taken on any day.

Anywhere between 98.2 and 97.2 is considered normal. If your temperature falls below this range, it indicates a sluggish thyroid or hypothyroid condition. (If it's above this range, your thyroid is overactive.)

risk of dementia doubles every five years. Presently, more than a quarter of those over 85 suffer from dementia, and with the "baby boomers" (those born between 1946 and 1964) now reaching their golden years, dementia, Alzheimer's, and Parkinson's will become even more commonplace in our society.

Although it appears that a certain degree of forgetfulness and memory difficulty is normal, new research has uncovered several steps that can be taken at any age to help protect your brain.

In the first article this month I discussed the concept of "physical reserve" in relation to your cardiovascular system. Scientists have now found that one of the best methods of fending off the symptoms of dementia and brain damage is to build up a similar "cognitive reserve."

Individuals who live intellectually stimulating lives and who are better educated are somehow better protected against the factors that trigger mental Hypothyroidism can result in weight gain, heart disease, fatigue, and mental changes including depression, confusion, and memory loss. On the bright side, the activity of the thyroid gland can usually be brought back into proper balance by using natural supplements instead of hormones. Dr. Barnes' temperature method allows you to monitor the results easily.

Balancing the thyroid naturally requires the use of products called glandulars. [Publisher's note: For a full explanation of glandulars see Vol. 4, No. 17.] Thyroid glandulars are available from several sources, but in my opinion the best is called Thytrophin by Standard Process Products. It's available from Doctors Health Supply, at *www.HealthStores.com* or 800-578-5939.

Roughly three tablets of Thytrophin is equivalent to one grain of thyroid hormone. Patients start with three tablets a day chewed between meals on an empty stomach. Even more dramatic results occur when one drop daily of IoSOL is also taken. IoSOL is a fantastic iodine product made and distributed by TPCS Distributors, 660 W. Baker Street, Suite 229, Costa Mesa, CA 92626 (800-838-8727).

## Tip from Vol. 5, March 1995

decline. And the protection is not just limited to advancing age, but also problems normally associated with stroke, head injuries, toxic poisoning, excess alcohol, HIV, Parkinson's, and Alzheimer's.

It appears that increased mental stimulation whether it comes from a career, reading, doing crosswords, or whatever—helps build up this cognitive reserve. Cognitive reserve isn't something you're born with. It's dynamic and changes with time. You can increase your cognitive reserve at any point in your life. MRI studies show that the brain builds up alternative and additional nerve pathways when it is challenged by a new problem.

Until this new discovery, scientists were unable to explain why some individuals were able to recover from a stroke while others with almost identical damage were left incapacitated. And, while Alzheimer's disease totally destroys the lives of most individuals, some who are afflicted with the disease live an almost completely normal life right to the end. In fact, in many cases, the only time Alzheimer's is discovered is during an autopsy.

When there is an assault to the brain, a cognitive reserve allows messages to be re-routed through alternative networks and pathways. In essence, the more neuronal networks you have, the more damage to the brain you can sustain without exhibiting the signs of mental decline.

Mental gymnastics isn't the only key to building a cognitive reserve. Nutrition can also play a key role in protecting and repairing the brain tissue. I've discussed many of these specific nutrients in the past—such as coenzyme Q10, L-carnitine, alpha lipoic acid, lecithin and related compounds, royal jelly, ashwagandha, et cetera. You can find details in past issues. Key components for learning and proper brain function are the fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid), which is why I strongly suggest that you eat foods that contain these compounds at least twice a week. (DHA is the more important of the two.) Particularly good sources are salmon, sardines, and tuna. I eat them all, but consider sardines one of the best bargains when it comes to improving brain health and increasing your cognitive reserve.

Sardines are not only good sources of essential fatty acids, they are one of the richest sources of nucleotides—the sub-units or building blocks from which your body creates RNA and DNA. And, among dozens of other positive attributes (see Vol. 10, No. 4 for the full story), they help stimulate the production of neurotransmitters in the brain. One of the best steps you can implement to build "cognitive reserve" is to eat two tins of sardines a week.

I don't want to belabor the point, but I need to mention that exercise also plays a role in brain function. It should go without saying that proper circulation can trigger new brain cell formation and ensure the proper nutrients and building materials are present when needed.

### This Is Your Brain on Drugs

One other largely overlooked factor that leads to dementia and mental decline is the use of drugs. Researchers in this area consistently warn against the use of "street drugs"—but never mention any of the dangers associated with over-the-counter or prescription drugs. The pharmaceutical industry would like you to believe that any of their products is safe when used as directed. The truth is that many drugs used by the elderly have side effects that mimic dementia, and can even lead to a diagnosis of Alzheimer's or Parkinson's disease. They can adversely alter brain function, often permanently. And we're talking about such commonly used remedies as those for hay fever, colds and flu, insomnia, headaches, bowel problems, and more.

I've said it before. Minimize your use of all types of drugs. They cause untold amounts of damage and disruption within the body, particularly with long-term use. Reducing your cognitive reserve is only one item in a long list of problems.

In speaking to the researchers who are studying cognitive reserve, two comments were made that stuck in my mind. First, based on his lifelong work, one researcher told me the bad news is that everyone will eventually get Alzheimer's if they live long enough. Second, the good news was that everyone has the ability to increase their cognitive reserve, regardless of age, and it is the most powerful tool we have to prevent the progression of the disease.

I've covered a lot of different areas. Don't get overwhelmed and end up doing nothing. Take one idea or technique at a time and implement it now. After it becomes routine, gradually add another then another. Remember, we're eating an elephant here.

Take care,

Dr. David William

If you have questions or comments for Dr. Williams, please send them to the mail or e-mail addresses listed to the right. Of course, practical and ethical constraints prevent him from answering personal medical questions by mail or e-mail, but he'll answer as many as he can in the Mailbox section of *Alternatives*. For our part, we'll do our best to direct you to his issues, reports, and products related to the subject of your interest.

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- If you are a licensed health professional and would like to learn how to begin reselling MHN supplements to your patients, please e-mail practitionerinquiries@davidwilliamsmail.com.
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